Remarks

Claims 1-31 are at issue. Claims 1-24 stand rejected under 35 USC 112, first paragraph as failing to comply with the enablement requirement. Claims 1-30 stand rejected under 35 USC 101 as being directed to non-statutory subject matter. Claims 1, 4-5, 13 & 16 stand rejected under 35 USC 102(e) as being anticipated by Nehab et al (US 6,029,182). Claims 2-3 & 24-25 stand rejected under 35 USC 103(a) as being unpatentable over Nehab in view of Voigt et al (US 5,537,534). Claims 6-12, 14-15 & 17-23 stand rejected under 35 USC 103(a) as being unpatentable over Nehab. Claims 27-28 stand rejected under 35 USC 103(a) as being unpatentable over Nehab further in view of Voigt, further in view of Yard et al (US 5,896,393). Claims 30, 31 stand rejected under 35 USC 103(a) as being unpatentable over Nehab further in view of Voigt, further in view of Leichty et al (US 6,041,060).

Abstract
The applicants believe the abstract meets all the legal requirements.

Claim Objections
Claim 23 has been amended to overcome the informality.

112 1st paragraph rejections
The applicants respectfully disagree with the Examiner's interpretation of independent claims 1, 16 & 24. Claims 1 & 24 were attempting to point out that in a single line, but not necessarily the only line, tags, a data entry and format characters were stored. However, the applicants certainly understand why the Examiner may have concluded that the flatten document was a single line. As a result, the applicants have amended the claims to clarify that one of the lines in the flatten document contains tags, a data entry and format characters. The rejection of claim 1 & 24 should be withdrawn.

Claim 16 as written is correct. The first data entry is found and open tags and the first data entry are stored on the first line. This is clearly shown in the specification. The rejection of claim 16 must be withdrawn.

35 USC 101
The Examiner states that the claims are directed to non-statutory subject matter because "the inventions may be performed by human means, without technological intervention" and "even if the methods were performed on a computer, they solely manipulate data without any observable result or interaction with the user".

The invention described herein achieves the technological result of reducing the amount of computer memory required to store structured data documents, such as XML documents. As a result, it also reduces the amount of bandwidth required to transmit an XML document. (See Background of the Invention page 2, line 19-21; and Pages 9-10, lines 23-26 & 1-4). Clearly the invention has an observable result and solves a pressing technical problem.

If the criteria, as applied by the Examiner, were true that inventions that could be performed solely by a human were non-statutory then Nehab patent (US 6,029,182) is directed to non-statutory matter. Clearly the data in a hypermedia article could be

reorganized by a human being without the aid of technology into another format. More broadly any invention directed to calculating error codes or directed to data compression schemes could be performed by a human without technological intervention.

The present application is directed to a useful, technological result – reducing the computer memory required to store a structured data document, e.g., an XML document. The rejection under 35 USC 101 must be withdrawn.

35 USC 102

Claim 1 requires that each line of the flattened data document contain a plurality of tags, a data entry and a plurality of format characters. Nehab is directed to converting Web hypermedia documents into "newspaper" like documents. There is no discussion of a line of the flattened data document containing tags, a data entry and a plurality of formatting characters. Claim 1 is allowable.

Claim 2 requires storing the tags in a tag and data store and the format characters in a map store. Neither Nehab or Voigt show storing the tags in a tag and data store or format characters in a map store. The section of Voigt pointed to by the Examiner does not discuss format characters. Voigt is directed to a RAID storage system. A RAID storage system has nothing to do with the technology of the present invention. Claim 2 is allowable.

Claim 3 requires storing a data entry in the tag and data store. The Examiner merely states a conclusion that this would be obvious. The Examiner must point to a reference that shows each element and the connection between elements to establish a prima facie case. The Examiner has not even attempted to meet this requirement. Claim 3 is allowable.

Claim 4 requires determining a first data entry and placing in a first line a first group of open tags and the first data entry. There is no discussion of a line of the flattened data document containing tags, a data entry and a plurality of formatting characters.

The Examiner attempts to cover this up by stating these steps are inherent to the process of flattening a structured data document. The Examiner has failed to understand that the flattening in Nehab is of the tree that defines the relationship between the hypermedia files. He is not flattening the document, but the relationship between the documents. Claim 4 is allowable.

Claim 5 is allowable for the same reasons as claim 4.

Claim 6 requires placing format characters in the first line. If this is so notoriously well know, then it will be no problem for the Examiner to find a reference. However, the applicants are confident that the Examiner will not be able to find such a reference. Claim 6 is allowable.

Claim 7- the Examiner's rejection is not even an honest attempt to establish a prima facie case of non-obviousness. The Examiner **Must** find references to support his assertions. Claim 7 is allowable.

Claim 8 requires placing a number in a line that indicates the number of consecutive tags. If this is so notoriously well know, then if will be no problem for the Examiner to find a reference. However, the applicants are confident that the Examiner will not be able to find such a reference. Claim 8 is allowable.

With regards to claims 9-12, 14-15, 17-23, if these steps are notoriously well know the Examiner will have not problem finding references to support his outrageous rejections, BUT until such references can be found these claims are all allowable and the Examiner has failed to carry any burden of proof.

Claim 13 is allowable as being dependent upon an allowable base claim.

Claim 16 requires determining a first data entry and placing in a first line a first group of open tags and the first data entry. There is no discussion of a line of the flattened data document containing tags, a data entry and a plurality of formatting characters.
The Examiner attempts to cover this up by stating these steps are inherent to the process of flattening a structured data document. The Examiner has failed to understand that the flattening in Nehab is of the tree the defines the relationship between the hypermedia files. He is not flattening the document, but the relationship between the documents. Claim 16 is allowable.

Claim 24 requires that each line of the flattened data document contain a plurality of tags, a data entry and a plurality of format characters. Nehab is directed to converting Web hypermedia documents into "newspaper" like documents. There is no discussion of a line of the flattened data document containing tags, a data entry and a plurality of formatting characters. Claim 24 is allowable.

Claim 25 requires pointers that point between a map store and a tag and data store. No where in Voigt is a tag and data store discussed. Claim 25 is allowable.

Claim 26 requires a cell in the map store for each flattened line. The Examiner's response says nothing about cells or flattened lines and neither does the prior art. Claim 26 is allowable.

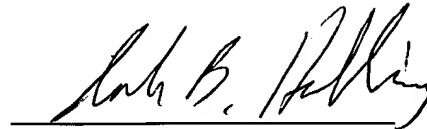Claims 27-29 are allowable for the same reasons as claim 26.

Claims 30 & 31 are allowable for the same reasons as claim 24.

The application has been placed in condition for allowance, prompt reconsideration and allowance are respectfully requested.
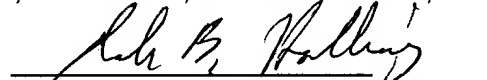
Respectfully submitted,

(Brandin)

By   *[signature]*

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I hereby certify that a _____Response_____ is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, P.O. Box 1450, Alexandria, VA 22313-1450, on:

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Signature (Dale B. Halling)

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